

THE ROLE OF ORGANISATIONAL CULTURE IN PROMOTING CREATIVITY AND INNOVATION: A REVIEW OF THE LITERATURE

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ABSTRACT

The twin processes of creativity and innovation have been shown to be of utmost importance to the success and sustainability of an organisation. Several researchers have pointed to the role of organisational culture in engendering innovation. This article is a review of the literature on the relationship between organisational culture and creativity/innovation. It attempts to answer some pertinent questions such as: How does one differentiate between creativity and innovation in organisations? Does the culture of an organisation play a role in creativity and innovation? What are some important dimensions of culture? How can a supportive culture be built? In addition, implications for Human Resource Management (HRM) are drawn out and discussed.

INTRODUCTION

At first glance, the concepts of creativity and innovation seem to overlap. However, several researchers have pointed out a distinct difference between the two, and thereby their implications for Human Resource Management (HRM).

In his recent book “Out Think : How Innovative Leaders Drive Exceptional Outcomes”, (Wiley, 2013) , Shawn Hunter defines creativity as the act of conceiving something original, while innovation is the implementation or creation of something new, of perceptible value to others. According to Hunter, business leaders often mistakenly view the two interchangeably. Once they understand the difference, leaders can inspire both, by building a culture that supports creativity, and thereby innovation.

Most research on creativity views it as a phenomenon that is initiated and exhibited at the individual level (Sternberg & Lubart, 1999). “The major focus in creativity research has been on the individual creator and his or her personality, traits, abilities, experiences, and thought processes” (Williams & Yang, 1999). Innovation, on the other hand, operates much more at the group and organisational levels. The focus is more on inter-relationships, interactions, and dynamics among actors and components of the organisation and its environment.

In an organisational context, however, the focus is more on taking a creative idea and applying it to real-life problems and situations. This process is referred to as innovation. It has been pointed out that creativity without innovation is of little value to an organisation. The converse is also true: creative ideas are a pre-requisite to innovation. Creativity and innovation are seen as overlapping constructs between two stages of the creative process – idea generation and idea implementation (Hellriegel et al., 1998).

Amabile (1996) defined innovation as “the successful implementation of creative ideas within an organisation”. According to Martins (2000), innovation is “the implementation of a new and possibly problem-solving idea, practice or material artifact (like a product) which is regarded as new by the relevant unit of adoption & through which change is brought about”.

(Van de Ven, 1986) defines innovation as the development and implementation of new ideas by employees who interact with others within an organisational framework. This definition focuses on four basic factors (new ideas, people, transactions, and institutional context). An understanding of how these factors are related, leads to four basic problems confronting most managers: (1) a human problem of managing attention, (2) a process problem of managing new ideas into good currency, (3) a structural problem of managing part-whole relationships, and (4) a strategic problem of institutional leadership. He further elaborates, “Innovation refers to the process of bringing any new problem solving idea into use . . . it is the generation, acceptance, and implementation of new ideas, processes, products, or services” (Van de Ven & Angle, 1989). This process can take place in many different domains; it can be technical, but also organisational (e.g., process improvements) or even social (e.g., quality circles) (Kanter, 1983).

Innovation comprises a series of tasks undertaken by individuals and groups in an organisation (Kanter, 1988). The process of innovation-be it technological or administrative, whether in products or processes or systems-tends to have four distinctive characteristics (Kanter, 1985).

1. It is uncertain
2. It is knowledge-intensive
3. It is controversial
4. It crosses boundaries

Kanter suggests that these micro processes are in turn stimulated, facilitated, and enhanced-or diminished- by a set of macro-level conditions. She further states that some of these structural and social factors are more important at certain stages of the process of innovation, than at others.

Innovation involves various activities aimed at providing value to customers and a satisfactory return to organisations (Ahmed, 1998). Post-industrial organisations are knowledge-based, & their success and survival depend on innovation. So organisations try to create an institutional framework to foster innovation. In today's competitive business environment, organisations view innovation as a means to achieving and sustaining strategic competitive advantage (Martins and Terblanche, 2003; Marques and Ferreira, 2009; Özgenc, 2006; Salaman and Storey, 2002; Unsworth and Parker, 2003).

Several researchers have pointed out the importance of the culture-innovation relationship. Contextual factors at the group and organisational levels (including organisational culture and climate), have been shown to influence the processes of creativity and innovation. "The social environment can influence both the level and frequency of creative behavior" (Amabile, Conti, Coon, Lazenby, & Herron, 1996).

This article is a review of the literature on the relationship between organisational culture and creativity/innovation. It attempts to answer some pertinent questions such as: How does one differentiate between creativity and innovation in organisations? Does the culture of an organisation play a role in creativity and innovation? What are some important dimensions of culture? How can a supportive culture be built? In addition, implications for Human Resource Management (HRM) are drawn out and discussed.

CREATIVITY, INNOVATION, ORGANISATIONAL CULTURE

Organisational culture has been shown to be an important influence on both individual and organisational processes and outcomes (Ahmed, 1998; Cameron and Quinn, 2006; Martins and Martins, 2002; McLean, 2005; Peters and Waterman, 1982; Zain et al., 2009). Thus, organisational culture seems to be critical to the success of an organisation. Successful organisations have the capacity to absorb innovation into the organisational culture and management processes (Syrett & Lammiman, 1997).

Organisational culture has been variously defined. In its simplest form, it can be construed as the way things are done in the organisation (Deal & Kennedy, 1982). It is a set of meanings created within the organisation, but influenced by broader social and historical processes. Culture can be seen in the norms and values that characterise a group or organisation; it is a system of shared values and norms that define appropriate attitudes and behaviours for its members.

Schein (1973) defines culture as "a pattern of basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems."

According to Martin (2002), culture is about deeply held assumptions, meaning, and beliefs. Schein's (1992) iceberg model treats culture as including all the elements of the iceberg that appear "under the waterline" or remain invisible for the most part. Therefore, culture is often studied using phenomenological methods incorporating the recounting of stories, observation of physical arrangements, and interpretation of jargon and rituals.

Geertz (1973) feels that culture is a system of shared symbols. When thinking about culture, managers should focus on norms and values that are really shared: the unofficial customs, rituals, and language that guide people in their everyday interactions. Along similar lines, culture is seen as the deeply seated values and beliefs shared by employees, manifested in the typical characteristics of the organisation. The components of routine behaviour, norms, values, philosophies, rules of the game & feelings, all form part of organisational culture (Hellriegel et al, 1998; Smit & Cronje, 1992).

Denison and Mishra (1995) identify four cultural traits as involvement, consistency, adaptability, and a sense of mission. Sinha (2000) mentions values, behaviour, relationships, technology, structure, procedure, and goals and objectives as components of organisational culture. He distinguishes between soft culture, work-centric nurturing culture, and technocratic culture.

A related issue concerns the ways in which culture has been studied in an organisation. Smircich (1983) points out that culture can be explored in two major ways. Variability approach focuses on causality. Culture is considered to be predictable and thus causes outcomes. The second approach referred to as Root Metaphor, considers culture as a process rather than as a product or a variable. Driskill and Brenton (2005) mention that root metaphor approach has three research traditions to consider culture: as shared cognition, as systems of shared symbols, and as the expression of unconscious processes. Schein (2004) advocates studying culture at the levels of Artifacts (visible organisational structures and processes), Espoused beliefs and values, and Underlying assumptions.

CULTURE AND INNOVATION

Several researchers have documented the effect of organisational culture on creativity and innovation (Ahmed, 1998; Martins and Terblanche, 2003; Martins and Martins, 2002; Mclean, 2005; Vincent et al, 2004). Organisational culture seems to have an influence on the degree to which creativity and innovation are stimulated in an organisation. Research shows that norms and values like speed, a sense of urgency, teamwork, doing whatever it takes to please the customer, listening, initiative, flexibility, and risk taking – all are directly related to "making the plane" and satisfying the customer (Tushman and O'Reilly, 1997). For example, at FedEx, organisational culture is an integral part of their competitive advantage.

Theoretical arguments (Ahmed, 1998; Barlow, 1999; Edwards et al., 2002; Martins and Martins, 2002; Vincent et al., 2004) along with empirical studies have found a positive effect of organisational culture on innovation capability (e.g., Dasanayaka, 2009; Han et al., 1998; Yeşil et al., 2012) and product innovation (e.g., Valencia et al., 2010).

As Tushman and O'Reilly (1997) further point out, successful organisations have the capacity to absorb innovation into the organisational culture and management processes. Thus organisational culture lies at the heart of organisational innovation. Kenny and Reedy (2007) emphasize that organisational culture affects the extent to which creative solutions are encouraged, supported and implemented. Martins and Terblanche (2003) posit that a culture supportive of creativity encourages innovative ways of representing problems and finding solutions. They explain that unlike operations where the activities are formalized and pre-specified, innovation is a non-routine activity where there is a fair amount of uncertainty around the tasks to be performed.

The basic elements of organisational culture (shared values, beliefs, and behaviour expected from members) affect creativity and innovation in two ways: 1) through the process of socialisation, norms are imbibed, and members make assumptions about whether or not creative & innovative behaviour is encouraged. 2) The basic values, assumptions, beliefs become enacted as structure, policy, practices and procedures. Thus individuals come to realise how they should behave and what is considered valuable in the organisation (Tesluk et al., 1997).

Others who have studied the relationship between culture and innovation include Pritchard and Karsick (1973), Jones and James (1979), Abey and Dickson (1983), Raelin (1987), Oldham and Cummings (1996), and Convey and MacMakin (1997).

Cameron and Quinn (1999) developed the Competing Values Framework model to categorise dimensions of organisational culture. This framework was used to construct an Organisational Culture Assessment Instrument (OCAI). Using this instrument, an organisational culture profile was drawn, establishing the organisation's dominant culture type. This model is quite popular, and has been used in many empirical studies on organisational culture (e.g., Obenchain and Johnson, 2004; Stock et al., 2007; Valencia et al., 2010).

The model defines four types of organisational cultures- clan, hierarchy, adhocracy, and market:

Clan: an organisation that concentrates on internal maintenance with flexibility, concern for people, and sensitivity to customers.

Hierarchy: an organisation that focuses on internal maintenance with a need for stability and control.

Adhocracy: an organisation that concentrates on external positioning with a high degree of flexibility and individuality.

Market: an organisation that focuses on external maintenance with a need for stability and control.

Of the four, broadly speaking, adhocracy and market cultures have been associated with higher innovation. The hallmark of an adhocracy culture is a dynamic, entrepreneurial, innovative and creative workplace (Cameron, 2004; Cameron and Quinn, 2006; Tseng, 2010). It emphasises new product and service development, growth, change, and experimentation (Cameron, 2004; Cameron and Quinn, 2006; Tseng, 2010). A market culture is characterised by a results-oriented workplace with emphasis on winning, outpacing the competition, escalating share price, and market leadership (Cameron, 2004; Cameron and Quinn, 2006).

ORGANISATIONAL SUPPORTS AND IMPEDIMENTS TO INNOVATION

The literature generally groups work factors affecting creativity and innovation into two categories that could be referred to as supports of, and impediments to, creativity and innovation. Often, these work factors (such as structure process, and climate) impact the culture of the organisation, thereby indirectly the processes of creativity and innovation. Vincent et al., (2004) argued that environmental, organisational capabilities, organisational demographics, and organisational structure variables affect innovation in organisations. In particular, organisational capabilities and structure account for the greatest level of unique variance on innovation.

It is interesting to note that Amabile's (1998) work has focused on three ingredients for creative output: (a) domain expertise (b) creative-thinking skills, and (c) intrinsic motivation. As did Amabile, Kanter addressed both supports and impediments to innovation. On the supports side, Kanter (1988) states that innovation is most likely to occur in organisations that (a) have integrative structures, (b) emphasize diversity, (c) have multiple structural linkages inside and outside the organisation, (d) have intersecting territories, (e) have collective pride and faith in people's talents, and (f) emphasize collaboration and teamwork.

More specifically, research has identified four broad factors conducive to innovation.

Organisational encouragement: This dimension encompasses several aspects, including encouragement of risk taking and idea generation, supportive evaluation of ideas, collaborative idea flow, and participative management and decision making (Amabile et al., 1996). Concepts put forth by other scholars align closely with some of these. For example, the idea of an open flow of communication across groups in the organisation is supported by Angle (1989) and Kanter (1983). In particular, Kanter puts a heavy emphasis on integrative structures, multiple structural linkages with intersecting territories and horizontal communication that is often supported by a matrix organisation. Organisational structures and a culture that supports, or perhaps more appropriately does not punish, this type of communication are more likely to engender effective creativity and innovation.

Robbinson and Stern (1997) highlight the example of 3M's invention of Scotchgard as an example of how opportunities for open communication flow resulted in a major commercial success through innovation. In this example, work originating outside the organisation was developed by scientists in one research unit and applied in another research unit. This series of events was made possible by an environment that encouraged its employees to reach out and connect with others who might benefit from an idea exchange and vice versa.

Supervisory encouragement: Supervisory encouragement includes clarity of team goals, supervisory support of the team's work and ideas, and an environment where open interactions are supported (Amabile et al., 1996). Angle (1989) was a little more specific in one of his propositions: "Innovation effectiveness is positively associated with group cohesiveness, provided that an open, confrontive climate for conflict resolution exists within the innovation team. Absent such a climate, cohesiveness is negatively related to the level of innovation in the team". Of particular interest, Oldham and Cummings (1996) tested Supportive Supervision, in conjunction with individual characteristics, and found no support for their hypothesis. However, they found support for a closely related hypothesis, that non controlling supervision is positively related to creative performance. In Tesluk et al.'s (1997) literature review, the concept of supervisory encouragement cuts across the climate dimensions identified. They discussed the role of the supervisor in clearly communicating goals, setting expectations for how those goals are accomplished, rewarding and recognizing accomplishments, providing task support, and creating an environment where risk taking is encouraged.

Work group encouragement: The conceptualization of work group encouragement focuses on diversity among group members and constructively challenging team members (Amabile et al., 1996). Creative performance is increased when diversity is allowed, when people with dissimilar frames of reference can exchange ideas, and when the organisation can effectively integrate creative personalities into the organisational mainstream (Angle, 1989; Kanter, 1983). Although not explicitly stated in the literature, these assertions have significant implications for organisational culture. The organisation that possesses these attributes must have a culture that strongly values, tolerates, and even embraces diversity, particularly diversity of personalities. Feist (1999) identified a number of personality traits, both social and non-social, of individuals who were especially creative compared to their peers. Some of those traits include dominance, arrogance, hostility, self-confidence, autonomy, introversion, and independence. These characteristics are likely to be at odds with organisational norms and have the potential to create conflict in the social construct of an organisation or work group, unless carefully and intentionally managed.

Freedom and autonomy: Another important factor seems to be granting freedom and autonomy to employees to determine the means by which to achieve a goal (Amabile, 1998), not necessarily autonomy for selecting what goals to go after. "In fact, clearly specified strategic

goals often enhance people's creativity" (Amabile, 1998). As discussed above, individuals who stand out in their ability to perform creative acts often value independence and autonomy. An organisational culture that supports autonomy in achieving clearly communicated goals will likely be more successful in terms of creativity and innovation than an organisation that does not. An environment of freedom and autonomy is more likely to tap into the intrinsic motivation of its employees, which has been a key factor in promoting creativity in organisations.

In sum, while organisational encouragement, supervisory encouragement, work group encouragement, freedom/autonomy, and resources support the ability to innovate, control reduces creative and innovative ability of the organisations.

(Robbinson & Stern, 1997) quote the example of Hewlett-Packard (HP). In developing the inkjet printer at Hewlett-Packard (HP), John Vaught and Dave Donald were given complete autonomy in pursuing their research into how heat could be used to eject ink onto paper. This autonomy was a motivating factor, as they were not hampered by organisational bureaucracy. Their intrinsic motivation and curiosity, coupled with their ability to tap into expertise both within and outside the organisation, contributed to a fantastic commercial success.

This example validates Lock & Kirkpatrick's observation that a culture supportive of creativity encourages innovative ways of representing problems & finding solutions, regards creativity as both desirable and normal, & favours innovators as models to be emulated (Lock & Kirkpatrick, 1995).

At a more macro level, certain environmental circumstances, strategic approaches, the values and actions of top management, organisational structure and technological cycles can be associated in the following ways with organisational cultures that support creativity and innovation (Tesluk et al 1997):

External Environment (e.g. economy & competitiveness encourage continual changes in technology, products, & customer preferences)

Reactions to critical incidents outside and within the organisation, which is reflected in the strategy (e.g. innovative strategy of the organisation)

Managers' values and beliefs (e.g. free exchange of information, open questioning, support for change and diversity of beliefs).

Flexible organisational structure with decentralisation, shared decision making, low to moderate use of formal rules & regulations, broadly defined job responsibilities and flexible authority structure with fewer levels in the hierarchy, technology (including the knowledge level of individuals & availability of facilities such as computers, internet) were shown to support the creative and innovative process (Hellriegel et al 1998).

According to Tushman and O'Reilly (1997), two main ingredients stimulate creativity: 1) support for risk taking and change and 2) tolerance of mistakes.

Support for risk taking and change: Recognising that innovation often requires extensive teamwork means that individual-based awards may be less effective in promoting innovation than team-based recognition and rewards. To stimulate creativity, the organisation has to encourage risk taking and accept failures. Aligning culture requires that managers simply use foresight and imagination to provide small rewards and informal recognition for creative attempts. This will help promote a positive attitude toward change, communicating that it is good to think out of the box. Odtics follows a policy of "structured spontaneity", which refers to deliberately not institutionalising things. P&G also drives this message home using a performance appraisal process. When subordinates set their annual goals, they are expected to show how they will change their job during the coming year.

Tolerance of Mistakes: Organisations should condone reasonable mistakes of employees. However, they should be careful to communicate what constitutes a reasonable mistake. Mistakes are permitted if they are based on analysis, foster learning, and are modest in impact. There must be continual support for those who try and do not succeed. Johnson & Johnson proclaim: "Failure is our most important product".

Kanter (1988) suggests that a dynamic model of innovation is needed which connects the major tasks in the innovation process to those structural arrangements and social patterns which facilitate each. Four major innovation tasks are discussed: (1) idea generation; (2) coalition building; (3) ideal realisation; and (4) transfer, or diffusion. The importance of flexibility, breadth of reach, and, particularly integration are emphasized.

She reasons that if innovation is uncertain, fragile, political, and imperialistic (reaching out to embrace other territories), then it is most likely to flourish where conditions allow flexibility, quick action and intensive care. The idea of coalition formation and connectedness gains importance: innovation is most likely in organisations with integrative structures and cultures emphasising diversity, multiple structural linkages both inside and outside the organisation in intersecting territories, collective pride and faith in people's talents, collaboration, and teamwork. Organisations producing more innovation have more complex structures that link people in multiple ways and encourage them to "do what needs to be done" within strategically guided limits rather than confining themselves to the letter of their job. Such organisations are also better connected with key external resources and operate in a favorable institutional environment.

Another concept of interest to contemporary researchers is that of innovation capability. It is defined "as a comprehensive set of characteristics of an organisation that support and facilitate

innovation strategies” (Burgelman et al., 2004). Martins & Terblanche (2003) state that innovation capability influences organisational performance in several ways.

Capabilities that firms possess in general are crucial in obtaining and sustaining competitive advantage (Akman and Yilmaz, 2008). In particular, innovation capability is associated with several strategic advantages. For instance, Shan and Zhang (2009) noted that sustained competitive advantage can be achieved by continually raising independent innovation capability in organisations. Innovation capability is also associated with the organisational potential to convert new ideas into commercial and community value (Terziovski, 2007).

Innovation capability is related to a variety of factors and thus is affected by different internal and external factors (Bullinger et al. 2007; Egbetokun et al. 2007). While innovation is a complex concept, research identifies five key areas that influence the ability of organisations to innovate. These influences relate to leadership; opportunistic behaviour; culture and change; learning; and networking and relationship building.

Of these influences, organisational culture has received considerable attention. Edwards et al., (2002) reflected that organisation culture comprising values, norms and beliefs is an invaluable enabler of innovation. Martins and Terblanche (2003) argued that organisational culture appears to have an influence on the degree to which creativity and innovation are stimulated in an organisation. Values, beliefs and norms affect innovation positively or negatively depending on how they affect employees and groups in organisations.

Other researchers agree that organisational culture is a contributing factor to the degree to which creative and innovative behaviour is found among employees in an organisation (Martins and Martins (2002). Han et al. (1998) argued that in recent years, a market-oriented corporate culture increasingly has been considered a key element of superior corporate performance. They found that market orientation facilitates an organisation's innovativeness. Ahmed (1998) argued that culture is a primary determinant of innovation, and possession of positive cultural characteristics provides the organisation with necessary ingredients to innovate. Yeşil and Kaya (2012) also contend that organisational culture (particularly an adhocracy culture) affects the innovation capability of firms.

Kanter (1988) points out that the signals employees receive about the expectations for innovation play a role in activating or inhibiting innovation. She lists a few:

- Allocation of funds specifically for innovation
- Cultural connotation of change (desirable or otherwise)
- Employees feeling valued and secure

In earlier work, Kanter mentions several factors facilitating innovation in an organisation: diversity and breadth of experience, openness to the external environment, multi-disciplinary working, multiple communication links, and smaller teams. Conversely, isolation or what can be termed "segmentalism" inhibits this critical first phase of innovation. Flexibility is another important organisational variable. Organisations that give the working team sufficient operating autonomy, and measure success or allocate rewards for results, rather than adherence to plan are likely to have higher rates of innovation. Because of the inherent uncertainty of innovation, advance forecasts about time or resource requirements are likely to be inaccurate; it is difficult to budget or to forecast when lacking an experience base by definition, in the case of a new idea (Kanter, 1983).

Amabile (1995) designed a quantitative scale to assess organisational work environment perceptions that are likely to influence the generation of creative ideas. These perceptions (positive or negative) were found to influence the level of creativity in organisations. Therefore, managers who wished to foster creativity and innovation were advised to pay attention to the environment they created for these potentially creative individuals.

A hallmark study in the area of innovation and creativity was the Minnesota Innovation Research Program led by Van de Ven, Angle, and Poole (1989) at the University of Minnesota. They highlighted the importance of information flows in the organisation, which in turn are dependent on organisational climate and culture. Expectations about the importance of communicating, the vehicles available for communicating, and the cues within the environment regarding with whom to communicate can determine how communication will influence innovation.

In their exhaustive literature review, Tesluk, Farr, and Klein (1997) focused on how organisational culture and climate influenced creativity at the individual level. Broadly, they identified five dimensions of organisational climate that influence creativity, including goal emphasis, means emphasis, reward orientation, task support, and socio-emotional support.

Goal emphasis is "the extent that goals for creativity and innovation and the standards for achieving those goals are made known to employees". Goal clarity allows employees to focus on generating ideas rather than on trying to determine which goals are important. Means emphasis is "the extent that the methods and procedures for creativity and innovation are conveyed to employees". If management communicates that it values the challenging of norms, active risk taking, information sharing, and open debate, employees are more likely to engage in those behaviors, conducive to innovation. Reward orientation is "the extent that rewards and evaluations are allocated on the basis of creativity and innovative results". Task support is "the extent that employees believe that they are being supported by allocations of the time, funding, equipment, materials, and services necessary to function creatively and to implement new ideas, projects and solutions". Finally, socio-emotional support is "the extent that employees believe

that the work environment provides the interpersonal support necessary to feel free to function creatively” (Tesluk et al., 1997).

Research has also focused on the role of leadership in enhancing innovative behaviour in the organisation. Leaders influence employees’ innovative behaviour both through their deliberate actions aiming to stimulate idea generation and application, as well as by their more general, daily behaviour. As a leader it seems impossible not to affect employees’ innovative behaviour.

Leaders vary in the extent to which they typically display consulting, delegating and monitoring behaviour. Leaders trying to enhance individual innovation among their employees could attempt to consult them more often, ensure that employees have sufficient autonomy in deciding how to go about their task, and support and recognize people’s initiatives and innovative efforts. Creating a positive and safe atmosphere that encourages openness and risk taking seems to encourage idea generation and application (de Jong and Hartog, 2007). These findings are in line with those of Tesluk et al (1997).

They further elucidate behaviours shown by leaders with the explicit purpose of influencing individual innovation. For example, communicating an attractive vision that explicitly incorporates the role and preferred types of innovation may guide idea generation and application behaviour. Possibilities for idea generation and opportunity exploration also seem to be enhanced by directly stimulating and probing employees to generate ideas (intellectual stimulation), supporting open and transparent communication processes, creating avenues for knowledge sharing and diffusion, and assigning challenging tasks to employees. When employees have frequent external contacts (with customers, suppliers, etc.) this also seems to spark ideas. They stress on factors needed to enhance employees’ motivation and innovation ability. Two such factors are organised feedback and financial rewards.

They further point out that some employees have better opportunities for idea generation than others (for instance, sales people who often meet external parties). Therefore, leaders should not expect a similar contribution to innovation from each of their employees. Also, when suggestions are never implemented, people become de-motivated.

In the same vein, Tushman and O’Reilly III (1997) enumerate three important levers managers can use to influence the social control system of their units: shaping culture through participation or systems of involvement that lead people to feel responsible, using management behavior to convey vivid messages about what attitudes and behaviors are important, and designing comprehensive systems of reward and recognition that are targeted at those attitudes and behaviors critical for success.

They vehemently state that leadership and organisational capabilities are of greater significance to the innovative process, than technological prowess. Effective innovation is engendered by

managers who can embrace and take advantage of the organisation's legacy. Such managers can proactively enable change, even in complacent or inertial organisations. However, developing shared expectations among employees to promote innovation takes time and requires absolute consistency by managers at all levels and constant repetition of the message.

Some researchers have focused more on facets of organisational culture which hinder the process of innovation. Kanter (1983) refers to segmentalism—"a culture and an attitude that make it unattractive and difficult for people in the organisation to take initiative to solve problems and develop innovative solutions". She lists 10 "Rules for Stifling Innovation" that include control of action, decisions, and information, hierarchical structures, and lack of supervisor support or encouragement. "The highest proportion of entrepreneurial accomplishments is found in organisations that are least segmented and segmentalist, companies that instead have integrative structures and cultures emphasizing pride, commitment, collaboration, and teamwork".

Control: An important impediment to creative performance identified in the literature is control (Amabile, 1998; Angle, 1989; Kanter, 1983; Oldham & Cummings, 1996). Control may be exercised in decision making, information flow, or even perceived in the form of reward systems that put too much emphasis on increasing extrinsic motivation. A culture that supports and encourages control will result in diminished creativity and innovation. The primary reason for this is that control negatively affects intrinsic motivation. According to Amabile (1988), expertise and creativity skills must be accompanied by intrinsic motivation to produce highly creative behavior. However, this notion may not be as straightforward as it appears. Kimberly (1981) found that in stable and predictable environments, some degree of formalisation and centralisation of decision making might actually increase an organisation's ability to implement innovations.

DETERMINANTS OF CULTURE

Since the culture of an organisation seems to influence its innovation capability, attention needs to be drawn to the antecedents of organisational culture. In other words, what factors shape the culture of an organisation? According to Abu-Jarad et al. (2010), several such factors have been studied. Examples are leadership, sector, technology, strategy, structure, support mechanisms, behaviour that encourages innovation, and communication. The operation of these factors results either in supporting or hindering innovation. These determinants overlap and interact with each other, supporting the open systems approach.

With regard to structure, pioneering work by Burns and Stalker (1961), distinguished between mechanistic and organic forms of organising. Mechanistic organisations were characterized as hierarchical, highly structured organisations with well-defined, formal roles and positions, with communication flowing primarily vertically. Organic organisations, by contrast, were typified by

their fluid organisational design, with departments and teams forming and re-forming to address new problems and opportunities, with communication flowing primarily laterally. They felt that compared to a mechanistic organisation, an organic one was more conducive to creativity and innovation. These findings were borne out by Lawrence and Lorsch (1967) in their paper on Contingency Theory. They hypothesised that inter-departmental relationships significantly influence an organisation's ability to produce new products. Angle (1989) supported this view, but only in environments of dynamic change. This conclusion also validated that of Kimberly (1981), who found that centralised decision making may enhance an organisation's ability to implement innovations, particularly in a more stable environment.

According to Dyer & Shafer (1998), contemporary organisations face global competition and a challenging business environment, compelling them to replace their bureaucratic structures with less hierarchical and decentralised organisations (Crant, 2000; Parker & Collins, 2010). This change is necessary in order to foster innovation and deliver competitive advantage for survival (Black & Synan, 1997). The modern economy sees a prevalence of such unconventional organisations in the form of technology firms which emphasize knowledge and innovation as core competences for a competitive edge (Hooff & Ridder, 2004). In such a challenging business environment, employees are expected to be more creative, more productive and more involved in the performance, innovation and survival of the organisation (Yesil, Koska & Büyükbese, 2013; Chowdhury, 2013; Vadra, Pratt & Mishra, 2013).

Organisational climate has also been viewed as a determinant of culture. Miner's (1979) Limited Domain Theory, supported by other research identifies hierarchic, professional, entrepreneurial and group domains. Each of the domains requires different types of behaviour, leaders, control systems and organisational designs.

More recently, Chowdhury (2013, 2015) recommends aligning the core values of the organisation with what he calls the "innovation value chain": idea generation, conversion and diffusion. He proposes the concept of 'Deviant Citizenship Behavior', an endogenous quality that requires an organisation to be risk tolerant, to strategise, and create appropriate organisational support systems for innovation. This is posited to be an important step forward in implementing an innovation culture in the organisation. For example, Google created an organisational structure that accommodates unconventional management practices within the traditional system.

IMPLICATIONS FOR HUMAN RESOURCE MANAGEMENT (HRM)

This literature review throws up several significant implications for the management of Human Resources in an organisation. Since many studies have shown the importance of organisational

culture to the process of innovation, the onus lies on the organisation to create a conducive culture. To summarise some specific pointers for leaders/managers:

- Communication seems to be a major focus area
 - There needs to be transparent communication top-down, in a consistent manner
 - Leaders should clearly articulate their vision for innovation
 - Employees should be encouraged to foster multiple communication links, both within and outside the organisation (free flow of information)
 - Communicating that creativity is normal and desirable
 - Clarity on what constitutes a reasonable mistake, and tolerance of such mistakes
 - Giving objective and timely feedback
- Promoting collaboration and cohesive teamwork
- Encouraging initiative and risk-taking
- Setting an expectation of accomplishing change, as part of the appraisal process
- Flexibility in structure and process – deliberately not institutionalising them
- Faith and pride in employees' talents
- Participation in decision making
- Autonomy and non-controlling supervision, enhancing intrinsic motivation
- Creating a confrontive climate for conflict resolution
- Tolerating and embracing diversity of personalities and views
- Encouraging a sense of individual responsibility
- Helping employees feel valued and secure
- Specific allocation of funds for innovation and financial rewards for the same

It is recommended that managers pay heed to factors relevant to their organisation, in order to build a positive culture for creativity and innovation.

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